MODIS TECHNICAL TEAM MEETING

Sept. 22, 1994

The MODIS Technical Team Meeting was chaired by Vince Salomonson. Present were John Barker, Chris Justice, Bill Barnes, Ed Masuoka, John Bauernschub, Bruce Guenther, Dorothy Hall, David Herring, and Dick Weber.

1.0 SCHEDULE OF EVENTS

Sept. 15	**533Q Financial Reports due to Teresa Mautino**
Oct. 11	Calibration Working Group, Holiday Inn, College Park, MD
Oct. 12 - 14	MODIS Science Team Meeting, Holiday Inn, College Park, MD
Oct. 15	Quarterly Technical Report for July-Sept. due to Barbara Conboy
Oct. 17 - 18	Oceans Productivity Working Group, Greenbelt Marriott Hotel

2.0 MINUTES OF THE MEETING

2.1 MODIS Project Reports

Weber announced that Hughes has decided to relocate SBRC personnel to the Hughes El Segundo facility, near Los Angeles airport, within the next 18 months. Weber said he is concerned about the possible loss of some of the essential, more experienced SBRC MODIS personnel. Moreover, he is concerned that the move in itself represents a disruption in MODIS development. Hughes has reassured NASA that the move will cause no problems in the ongoing development of MODIS.

2.1.1 SBRC Corrects One Spurious Light Problem

Weber reported that the MODIS scan cavity could "see" light reflected from the solar array. According to Weber, SBRC has corrected this problem—a small extension of the sun shade was added to block light coming into the scan cavity from the solar array.

2.2 MCST Reports

Guenther reported that the ground blackbody at SBRC was found to have a relatively high level of reflectance. The ground blackbody surface is anodized and became crazed when in ground testing it was accidentally heated to 375K. The blackbody anodized surface may have been too thick to sustain the expansion caused by overheating. SBRC is looking for a replacement surface preparation for the blackbody that will accommodate the required temperature shifts.

Guenther announced that the MCST delivery of Beta 2 software will be a week late. And, because MCST must make major revisions to the previous version of the Calibration ATBD, that revision will be late also. Guenther will present MCST's plans to the Science Team at the Calibration Working Group Meeting on Oct. 11. Guenther has prepared the agenda for that meeting (see Attachment 1).

Guenther stated that one item on the Calibration Working Group Meeting agenda is a discussion of EOS AM-1 spacecraft maneuvers to view the moon. Weber interjected that the EOS AM Project currently carries no specifications for a roll maneuver. Barker responded that from a relative standpoint, viewing the moon will help MCST characterize MODIS. However, whether viewing the moon will be used as an absolute calibration technique depends upon the group's modeling efforts.

Salomonson stated that he is concerned about the MODIS calibration being too dependent upon viewing the moon. Barker agreed that MODIS calibration shouldn't be dependent upon viewing the moon, but that, as Weber pointed out at an earlier meeting, by "wiggling" the spacecraft a little, you can deliberately increase the spaceport's viewing swath to view the moon many times, and hence better characterize the instrument. Barker feels this is a good idea because the maneuver is almost trivial.

2.3 SDST Reports

Masuoka reported that he met with Bob Evans at the EOS ancillary data workshop and that Evans gave him and Angela Li, the Oceans lead for the SDST Algorithm Transfer Team, a tutorial on how the Sea Surface Temperature product is produced. This information will enable the ATT to fill out the detailed spreadsheets required by the HAIS modeling team.

Regarding data product abstracts, Masuoka said he has received inputs from only Salomonson and Michael King. Masuoka reminded the Team that EOS Project would like to post abstracts for each data product on an ftp server before the IDS meeting in mid-October. Justice asked why SDST didn't simply retype the abstracts from the ATBDs. Masuoka mentioned that the data product abstract covers different areas than the abstract for the ATBD and indicated that it would need to be prepared by the Science Team member responsible for the product. Masuoka agreed to send another email to Team Members reminding them of the need to provide data product abstracts.

2.4 1995 Snow and Sea Ice Missions Planned

Hall announced she has reserved 32 flight-hours of the NASA ER-2 for snow and sea ice missions next year. Also, NOAA aircraft equipped with passive microwave measuring instrumentation will be used.

2.5 MODIS Land Group Reports

Justice informed the Team that, according to Eric Vermote, the SDST simulation data workshop at Flathead Lake went well. Justice said he would like to see a summary of that meeting presented at the Science Team Meeting.

Justice attended the IWG Meeting on validation.

3.0 ACTION ITEMS

3.1 Action Items Carried Forward

1. *MODIS Team*: Determine how, given the MODIS bowtie effect, MODIS images will be produced at launch.
2. *Science Team:* Provide information to Salomonson regarding the significance of the timing error issue.
3. *Fleig and Ungar*: Interact with the group leaders prior to developing a MODIS data simulation plan for review at the next Science Team Meeting.

4.0 ATTACHMENTS

1. Calibration Working Group Meeting Agenda, by Bruce Guenther

October 11, 1994
Holiday Inn
College Park, Maryland
TENTATIVE AGENDA

8:30 am	Introduction and Welcome — P. Slater
8:45 am	MODIS Sensor / SBRC Status Report — J. Young and T. Pagano (potential topics: review of Engineering Model status and test plans, review on test fixtures, description of blackbody surface status)
9:45 am	Break
10:00 am	Team Scientist Briefing — J. Barker
10:30 am	MODIS Characterization Support Team Status — B. Guenther (platform maneuvers for calibration, software beta-2 briefing, status of default mode for solar diffuser door)
12:00 noon	Lunch Break
1:00 pm	Algorithm Theoretical Basis Document Briefing — H. Montgomery & P. Abel
5:00 pm	Adjourn